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Anderson Gorecki & Manaras, LLP			PAULS, JOHN A	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/805,993	<b>Applicant(s)</b> SCHOFIELD ET AL.	
	<b>Examiner</b> JOHN A. PAULS	<b>Art Unit</b> 3686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>18 November, 2004</u> .                                       | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

1. This action is in reply to the application filed on 22 March, 2004.
2. Claims 1 - 36 are currently pending and have been examined.

### ***Information Disclosure Statement***

3. The Information Disclosure Statement filed on 18 November, 2004 has been considered.  
An initialed copy of the Form 1449 is enclosed herewith.

### ***Drawings***

4. The drawings are objected to under 37 CFR 1.83(a) because they fail to show DICOM gateway 103 relative to Figure 1 as described in the specification paragraph 0015. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several

views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

5. The disclosure is objected to because of the following informalities: The reference numbers for network 106 in paragraph 0015; network 206 in paragraph 0018 and network 204 in paragraph 0025 should be 104. Appropriate correction is required.

### ***Claim Objections***

6. Claims 1 and 19 are objected to because of the following informalities: The term data is misspelled “date”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1 – 9 and 10 – 18 are rejected under 35 U.S.C. 101 because The steps recited do not qualify as a statutory process. In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter. Although the steps are performed using a computer, the computer is a field of use limitation because the steps are human actions that do not require (i.e. are not tied to) the computer.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
10. Claims 1 – 9 and 19 – 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 19 recites the limitation "*plurality of image archive resources*". There is no antecedent basis for this limitation in the claim.
11. Claims 19 – 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. Claims 19 and 22 recite the limitation "*plurality of resources*".

Claims 20, 26 and 27 recite the limitation "*recourses*". There is no antecedent basis for this limitation in the claims.

12. Claims 28 – 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 28 and 31 recite the limitation "*plurality of resources*". Claims 19, 35 and 36 recite the limitation "*recourses*". There is no antecedent basis for this limitation in the claims.
13. Claims 15, 16, 33 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 15, 16, 33 and 34 recite the limitation "*the parameter*". There is no antecedent basis for this limitation in the claims.
14. Claims 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 17 and 18 recite the limitation "*the resources*". It is unclear whether the "*resource*" is referring to "*the plurality of resources*" or "*the selected resource*".

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. Claims 1 – 9 and 19 - 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US PG PUB 2002/0016718 A1) and in further view of Primak et al. (US 6,389,448 B1) and in further view of Martin (US 6,263,368 B1) and in further view of Carr (US 6,301,617 B1).

**CLAIMS 1 and 19**

Rothschild as shown discloses a medical image management system with the following limitations:

- *a network element coupled to a network and configured to send and receive data via the network; (see at least Rothschild paragraph 0039 and 0043);*
- *the network service configured to:*
  - *receive medical image data including a task to be performed; (see at least Rothschild paragraph 0036 and 0046);*
  - *transferring, by the network service, the medical image data to the selected resource; (see at least Rothschild paragraph 0039);*

Rothschild as shown discloses the limitations shown above. Rothschild does not specifically disclose the following limitations, however, Primak does:

- *a network service coupled to the network element; (see at least Primak column 3 line 49 – 52);*
- *the network service configured to:*
  - *monitor a parameter associated with each of the plurality of systems indicative of the available capacity of each of the plurality of image archive resources; (see at least Primak column 4 line 7 – 19 and line 30 - 37);*
  - *select one of the plurality of resources to transfer the medical image data using as a selection function the available capacity of each of the resources; (see at least Primak column 4 line 46 – 50);*

Primak discloses a load balancing system which includes monitoring a parameter indicative of available capacity. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild



so as to have included monitoring a parameter indicative of available capacity, in accordance with the teaching of Primak, in order to dynamically distribute the load between servers in a server cluster, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Rothschild as shown discloses the limitations shown above. Rothschild does not specifically disclose the following limitations, however, Martin does:

- *the network service configured to:*
  - *determine the level of complexity of the task to be performed; (see at least Martin column 1 line 41 – 44 and column 3 line 42 – 48);*
  - *select one of the plurality of resources to transfer the medical image data using as a selection function the complexity of the task to be performed; (see at least Martin column 5 line 14 – 28).*

Martin discloses a load balancing system which includes determining the complexity of the task to be performed. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included determining the complexity of the task to be performed, in accordance with the teaching of Martin, in order to dynamically distribute the load between servers in a server cluster based on task complexity, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Rothschild as shown discloses the limitations shown above. Rothschild does not specifically disclose the following limitations, however, Carr does:

- *the network service configured to: extract the task from the medical image data; (see at least Carr column 6 line 33 – 37).*

Carr discloses a resources selection system which includes extracting a task from the data file. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included extracting a task from the data file, in accordance with the teaching of Carr, in order to dynamically distribute the load between servers in a server cluster, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

### **CLAIMS 3, 4, 8, 9, 21, 22, 26 and 27**

The combination of Rothschild/Primak/Martin/Carr as shown discloses the limitations shown above with respect to Claims 1 and 19 respectively. Rothschild also discloses the following limitations:

- *the medical image data is formatted as a DICOM message; (see at least Rothschild paragraph 0040 and 0041);*
- *the plurality of resources comprises a plurality of image archive systems; (see at least Rothschild paragraph 0052);*
- *the resource is a cluster of reporting/reviewing stations; (see at least Rothschild paragraph 0046);*

- *the resource is a radiological information system; (see at least Rothschild paragraph 0047).*

**CLAIMS 2, 6, 7, 20, 24 and 25**

The combination of Rothschild/Primak/Martin/Carr as shown discloses the limitations shown above with respect to Claims 1 and 19 respectively. Additionally, Primak discloses the following limitations:

- *the network service is operative to select the one of the resources having the greatest available capacity relative to the complexity level of the task to be performed; (see at least Primak column 5 line 46 – 22);*
- *the parameter is one of the group consisting of the PACS server load or the PACS storage time; (see at least Primak column 4 line 12 – 19);*
- *the parameter is one of the group consisting of the resource load, the capacity of the network, or the congestion of the network; (see at least Primak column 4 line 12 – 19).*

Primak discloses a load balancing system which includes monitoring a parameter indicative of available capacity. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included monitoring a parameter indicative of available capacity, in accordance with the teaching of Primak, in order to dynamically distribute the load between servers in a server cluster, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

### **CLAIMS 5 and 23**

The combination of Rothschild/Primak/Martin/Carr as shown discloses the limitations shown above with respect to Claims 1 and 19 respectively. The combination of Rothschild/Primak/Martin/Carr does not specifically disclose the following limitations:

- *the plurality of image archive systems comprises a plurality of Picture Archive System (PACS).*

However, Rothschild discloses a medical image management system that contains all of the features of a PACS. Therefore it would be obvious to one of ordinary skill in the art to modify Rothschild to include the term PACS, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

18. Claims 10 – 14, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US PG PUB 2002/0016718 A1) and in further view of Carr (US 6,301,617 B1) and in further view of Liu et al. (US 5,031,089).

### **CLAIM 10**

Rothschild as shown discloses a medical image management system with the following limitations:

- *receiving, by the network service, medical image data including a task to be performed; (see at least Rothschild paragraph 0036 and 0046);*
- *transferring, by the network service, the medical image data and the task to the selected resource; (see at least Rothschild paragraph 0039).*

Rothschild as shown discloses the limitations shown above. Rothschild does not specifically disclose the following limitations, however, Carr does:

- *assigning, by the network service, a priority level associated with each of the plurality of resources;* (see at least Carr column 4 line 5 – 7 and line 19 – 26);
- *extracting, by the network service, the task from the medical image data;* (see at least Carr column 6 line 33 – 37);
- *selecting, by the network service one of the plurality of resources to transfer the task to be executed thereby, the selection based on the priority level of the resource;* (see at least Carr column 4 line 5 – 7).

Carr discloses a resources selection system which includes extracting a task from the data file and assigning a priority level to resources. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included extracting a task from the data file and assigning a priority level to resources, in accordance with the teaching of Carr, in order to dynamically distribute the load between servers in a server cluster based on server priority, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Rothschild as shown discloses the limitations shown above. Rothschild does not specifically disclose the following limitations, however, Liu does:

- *assigning, by the network service, a priority level to the task;* (see at least Liu column 1 line 60 – 66 and Claim 4);

- *selecting, by the network service one of the plurality of resources to transfer the task to be executed thereby, the selection based on the priority level of the task;* (see at least Liu column 1 line 60 – 66 and Claim 4).

Liu discloses a resources allocation system which includes assigning a priority level to a task.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included assigning a priority level to a task, in accordance with the teaching of Liu, in order to dynamically distribute the load between servers in a server cluster based on task priority, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

#### **CLAIMS 11, 13, 17 and 18**

The combination of Rothschild/Carr/Liu as shown discloses the limitations shown above with respect to Claim 10. Rothschild also discloses the following limitations:

- *the medical image data is formatted as a DICOM message;* (see at least Rothschild paragraph 0040 and 0041);
- *the plurality of resources comprises a plurality of image archive systems;* (see at least Rothschild paragraph 0052);
- *the resource is a cluster of reporting/reviewing stations;* (see at least Rothschild paragraph 0046);
- *the resource is a radiological information system;* (see at least Rothschild paragraph 0047).

## CLAIM 12

The combination of Rothschild/Carr/Liu as shown discloses the limitations shown above with respect to Claim 10. Additionally, Carr discloses the following limitations:

- *the step of selecting comprises selecting the one of the plurality of resources having a priority less than or equal to the priority level of the task; (see at least Carr column 4 line 5 – 7).*

Carr discloses a resources selection system which includes extracting a task from the data file and assigning a priority level to resources. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included extracting a task from the data file and assigning a priority level to resources, in accordance with the teaching of Carr, in order to dynamically distribute the load between servers in a server cluster based on server priority, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

The combination of Rothschild/Carr does not specifically disclose *the priority level of the task*; however, Liu in at least Liu column 1 line 60 – 66 and Claim 4 does.

Liu discloses a resources allocation system which includes assigning a priority level to a task.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included assigning a priority level to a task, in accordance with the teaching of Liu, in order to

dynamically distribute the load between servers in a server cluster based on task priority, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

#### **CLAIM 14**

The combination of Rothschild/Carr/Liu as shown discloses the limitations shown above with respect to Claims 10. The combination of Rothschild/Carr/Liu does not specifically disclose the following limitations:

- *the plurality of image archive systems comprises a plurality of Picture Archive System (PACS).*

However, Rothschild discloses a medical image management system that contains all of the features of a PACS. Therefore it would be obvious to one of ordinary skill in the art to modify Rothschild to include the term PACS, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

19. Claims 15, 16 and 28 - 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (US PG PUB 2002/0016718 A1) and in further view of Carr (US 6,301,617 B1) and in further view of Liu et al. (US 5,031,089) and in further view of Primak et al. (US 6,389,448 B1).



**CLAIMS 15 and 16**

The combination of Rothschild/Carr/Liu as shown discloses the limitations shown above with respect to Claims 10. The combination of Rothschild/Carr/Liu does not specifically disclose the following limitations, however, Primak does:

- *the parameter is one of the group consisting of the PACS server load or the PACS storage time; (see at least Primak column 4 line 12 – 19);*
- *the parameter is one of the group consisting of the resource load, the capacity of the network, or the congestion of the network; (see at least Primak column 4 line 12 – 19).*

Primak discloses a load balancing system which includes monitoring a parameter indicative of available capacity. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included monitoring a parameter indicative of available capacity, in accordance with the teaching of Primak, in order to dynamically distribute the load between servers in a server cluster, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

**CLAIM 28**

Rothschild as shown discloses a medical image management system with the following limitations:

- *a network element coupled to a network and configured to send and receive data via the network; (see at least Rothschild paragraph 0039 and 0043);*
- *the network service configured to:*

- *receive medical image data including a task to be performed; (see at least Rothschild paragraph 0036 and 0046);*
- *transfer the medical image data and the task to the selected resource; (see at least Rothschild paragraph 0039).*

Rothschild as shown discloses the limitations shown above. Rothschild does not specifically disclose the following limitations, however, Carr does:

- *the network service configured to:*
  - *assign a priority level associated with each of the plurality of resources; (see at least Carr column 4 line 5 – 7 and line 19 – 26);*
  - *extract the task from the medical image data; (see at least Carr column 6 line 33 – 37);*
  - *select one of the plurality of resources to transfer the task to be executed thereby, the selection based on the priority level of the resource; (see at least Carr column 4 line 5 – 7).*

Carr discloses a resources selection system which includes extracting a task from the data file and assigning a priority level to resources. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included extracting a task from the data file and assigning a priority level to resources, in accordance with the teaching of Carr, in order to dynamically distribute the load between servers in a server cluster based on server priority, since

so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Rothschild as shown discloses the limitations shown above. Rothschild does not specifically disclose the following limitations, however, Liu does:

- *the network service configured to:*
  - *assign a priority level to the task;* (see at least Liu column 1 line 60 – 66 and Claim 4);
  - *select one of the plurality of resources to transfer the task to be executed thereby, the selection based on the priority level of the task;* (see at least Liu column 1 line 60 – 66 and Claim 4).

Liu discloses a resources allocation system which includes assigning a priority level to a task.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included assigning a priority level to a task, in accordance with the teaching of Liu, in order to dynamically distribute the load between servers in a server cluster based on task priority, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Rothschild as shown discloses the limitations shown above. Rothschild does not specifically disclose the following limitations, however, Primak does:

- *a network service coupled to the network element;* (see at least Primak column 3 line 49 – 52);

Primak discloses a load balancing system which includes a network service. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included a network service, in accordance with the teaching of Primak, in order to dynamically distribute the load between servers in a server cluster, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

**CLAIMS 29, 31, 35 and 36**

The combination of Rothschild/Carr/Liu/Primak as shown discloses the limitations shown above with respect to Claim 28. Rothschild also discloses the following limitations:

- *the medical image data is formatted as a DICOM message;* (see at least Rothschild paragraph 0040 and 0041);
- *the plurality of resources comprises a plurality of image archive systems;* (see at least Rothschild paragraph 0052);
- *the resource is a cluster of reporting/reviewing stations;* (see at least Rothschild paragraph 0046);
- *the resource is a radiological information system;* (see at least Rothschild paragraph 0047).

**CLAIM 30**

The combination of Rothschild/Carr/Liu/Primak as shown discloses the limitations shown above with respect to Claim 28. Additionally, Carr discloses the following limitations:

- *the step of selecting comprises selecting the one of the plurality of resources having a priority less than or equal to the priority level of the task; (see at least Carr column 4 line 5 – 7).*

Carr discloses a resources selection system which includes extracting a task from the data file and assigning a priority level to resources. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included extracting a task from the data file and assigning a priority level to resources, in accordance with the teaching of Carr, in order to dynamically distribute the load between servers in a server cluster based on server priority, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

The combination of Rothschild/Carr does not specifically disclose *the priority level of the task*; however, Liu in at least Liu column 1 line 60 – 66 and Claim 4 does.

Liu discloses a resources allocation system which includes assigning a priority level to a task. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included assigning a priority level to a task, in accordance with the teaching of Liu, in order to dynamically distribute the load between servers in a server cluster based on task priority, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

### **CLAIMS 33 and 34**

The combination of Rothschild/Carr/Liu/Primak as shown discloses the limitations shown above with respect to Claims 28. Additionally, Primak discloses the following limitations:

- *the parameter is one of the group consisting of the PACS server load or the PACS storage time; (see at least Primak column 4 line 12 – 19);*
- *the parameter is one of the group consisting of the resource load, the capacity of the network, or the congestion of the network; (see at least Primak column 4 line 12 – 19).*

Primak discloses a load balancing system which includes monitoring a parameter indicative of available capacity. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the medical image management system of Rothschild so as to have included monitoring a parameter indicative of available capacity, in accordance with the teaching of Primak, in order to dynamically distribute the load between servers in a server cluster, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

### **CLAIM 32**

The combination of Rothschild/Carr/Liu/Primak as shown discloses the limitations shown above with respect to Claims 10. The combination of Rothschild/Carr/Liu/Primak does not specifically disclose the following limitations:

- *the plurality of image archive systems comprises a plurality of Picture Archive System (PACS).*

However, Rothschild discloses a medical image management system that contains all of the features of a PACS. Therefore it would be obvious to one of ordinary skill in the art to modify Rothschild to include the term PACS, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **John A. Pauls** whose telephone number is **(571) 270-5557**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **Jerry O'Connor** can be reached at **571.272.6787**. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

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Examiner, Art Unit 3686

Date: 7 May, 2009

/Gerald J. O'Connor/

Supervisory Patent Examiner

Group Art Unit 3686